



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|-----------------------|---------------------|------------------|
| 10/702,099 | 11/05/2003 | Rupert A. Schmidtberg | S1446.70000US01 | 6804 |

23628 7590 04/20/2006

WOLF GREENFIELD & SACKS, PC
FEDERAL RESERVE PLAZA
600 ATLANTIC AVENUE
BOSTON, MA 02210-2206

EXAMINER

LE, UYEN CHAU N

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2876

DATE MAILED: 04/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-------------------------------|------------------------------------|--|
| Office Action Summary | Application No. 10/702,099 | Applicant(s) SCHMIDTBERG ET AL. | |
| | Examiner Uyen-Chau N. Le | Art Unit 2876 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2006.
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1-41 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Prelim. Amdt/Amendment

1. Receipt is acknowledged of the Amendment filed 30 January 2006.

Claim Rejections - 35 USC § 112

2. Claims 1-41 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re claims 1-41: The phrase "not used to represent any detectable condition" recited in claims 1, 27 and 41 is not clear. "not used to represent any detectable condition," does that mean it cannot be read? Or is it a "dead zone"?

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the

Art Unit: 2876

art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-15, 27-35 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daum et al (US 6,826,267) in view of Abali et al (US 6,712,276).

Re claim 1: Daum et al discloses at least one storage device (i.e., RF tag) (col. 6, lines 60-65) storing at least one dynamic identifier associated with at least one item (i.e., food, etc.) (col. 6, lines 60-65), the at least one dynamic identifier configured to include at least one variable portion (see fig. 2) that has at least one of a variable content and a variable length based at least in part on at least one

Art Unit: 2876

detectable condition (i.e., temperature, etc.) associated with the at least one item (i.e., food, etc.) (col. 4, lines 18-22 and col. 6, lines 60-65).

Daum et al, however, is silent with respect to the at least one variable portion represents at least in part at least one detectable condition associated with the at least one item.

Abali et al teaches an integrated circuit sensor 100 having a storage 104 for storing a product information code (i.e., ID) and information data representing the conditions associated with the product (e.g., temperature), which received from the sensor 101; wherein information data stored in the storage 104 recorded as a binary encoded string, which can be implemented with dynamic memory; and wherein based on the temperature sensed by the sensor 101, the expiration date of the product is dynamically updated/adjusted (figs. 1-5; col. 2, line 34 through col. 4, line 33).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to encode the binary string information of the temperature/condition associated with the product as taught by Abali et al into the system of Daum et al in order to provide Daum et al a more diverse system which can be utilized in various applications (i.e., diagnostic commands, software update, temperature

Art Unit: 2876

monitoring, etc.). Furthermore, such modification would have been an obvious engineering variation, well within the ordinary skill in the art, due to the fact the ones can encodes any information data as desired (i.e., including temperature or other condition data) into a code string, and therefore an obvious expedient.

Re claim 2: wherein the at least one dynamic identifier has a fixed length and a plurality of fields (fig. 2), and wherein the at least one variable portion has a variable content based at least in part on the at least one detectable condition and at least one field of the plurality of fields (Daum et al: col. 3, line 44 through col. 4, line 34).

Re claims 3-5: wherein the at least one detectable condition relates to a measurable parameter (i.e., temperature, etc.) of the at least one item itself, environment, an elapsed time from at least one event associated with the at least one item, respectively (Daum et al: col. 6, lines 30-65).

Re claims 6-7: wherein the at least one dynamic identifier includes at least one dynamic electronic product code (EPC), which further includes a fixed portion including at least one of a first identifier related to a source (i.e., manufacture MFG) of the at least one item; a second identifier related to a product type (i.e., appliance type APPL TYPE) of the at least

Art Unit: 2876

one item (Daum et al: see figs. 2-4; col. 3, line 44 through col. 4, line 34).

Re claims 8-11: the apparatus is in combination/integrated/attached/embedded respectively in the at least one item (Daum et al: col. 6, line 64).

Re claim 12: wherein the at least one storage device is configured to store the at least one dynamic EPC as a variable binary number (Daum et al: fig. 2; col. 6, line 66 through col. 7, line 4).

Re claims 13-15: wherein the variable binary number includes at least 64 bits, 96 bits, and 128 bits, respectively (Daum et al: figs. 2-4; col. 3, line 44 through col. 4, line 34).

Re claim 27: see claims 1 and 6-7.

Re claim 28: wherein the signal is a radio-frequency signal configured for wireless transmission (i.e., RF tag sensor) (Daum et al: col. 6, line 64).

Re claim 29: wherein the signal is configured for optical transmission (i.e., barcode scanner) (Daum et al: col. 6, line 64).

Re claim 30: wherein the signal is configured for transmission over a network 100 (Daum et al: fig. 1; col. 3, lines 12+).

Re claim 31: see claim 7.

Re claims 32-35: see claims 12-15.

Re claim 40: the at least one detectable condition includes at least one temperature associated with the at least one item; the at least one variable portion of the at least one dynamic EPC includes at least one representation of the at least one temperature (Daum et al: col. 6, lines 30-65); the at least one dynamic EPC further includes a fixed portion including at least one of: a first identifier related to a source (i.e., manufacture MFG) of the at least one item; a second identifier related to a product type (i.e., appliance type APPL TYPE) of the at least one item (Daum et al: see figs. 2-4; col. 3, line 44 through col. 4, line 34); the at least one dynamic EPC is encoded as a variable binary number including at least 64 bits (Daum et al: figs. 2-4; col. 3, line 44 through col. 4, line 34); and the signal is a radio-frequency (RF) signal configured for wireless transmission (i.e., RF tag sensor) (Daum et al: col. 6, line 64).

6. Claims 16-26, 36-39 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daum et al as modified by Abali et al as applied to claims 1 and 27 above, and further in view of Shaw (US 6,563,417). The teachings of Daum et al as modified by Abali et al have been discussed above.

Art Unit: 2876

Re claims 16-17 and 41: Daum et al/Abali et al have been discussed above but fail to teach or fairly suggest that the storage device is configured to be updated periodically.

Shaw teaches an RF tag 12 comprising a processor (i.e., microcontroller 8) coupled to storage device (i.e., memory 4) and the temperature sensor 2, wherein the sensed information may be maintained and regularly updated (col. 5, lines 40-58).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the teachings of Shaw into the system as taught by Daum et al/Abali et al in order to provide Daum et al/Abali et al with a versatile system in which the condition of the item and/or the environment in which the item is surrounded can be monitored/updated instantaneously upon any changes, thus any unexpected changes that would affect the item's condition can be detected, stopped and/or corrected readily; therefore, reduce the rate of bad quality and/or waste of the item.

Re claim 18: wherein the at least one detectable condition includes at least one temperature associated with the at least one item (i.e., via temperature sensor 2) (Shaw: fig. 1; col. 5, lines 40-58).

Re claim 19: wherein the at least one detectable condition includes at least one refrigeration condition associated with the at least one item (Daum et al: fig. 6; col. 6, lines 30-45).

Re claims 20 and 21: wherein the at least one detectable condition relates to a shelf life/impact sustained of the at least one item (Shaw: fig. 2; col. 5, lines 22-29).

Re claim 22: see claims 7 and 16.

Re claims 23-26: see claims 8-11.

Re claims 36-39: see claims 18-21.

Response to Arguments

7. Applicant's arguments filed 30 January 2006 have been fully considered but they are not persuasive.

Newly amended limitation "not used to represent any detectable condition" renders the claims 1-41 to indefinite.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Uyen-Chau N. Le whose telephone number is 571-272-2397. The examiner can normally be reached on First Monday 5:30AM-1:30PM and Tues-Fri 5:30AM-3PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on 571-272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Uyen-Chau N. Le
Primary Examiner
Art Unit 2876

April 17, 2006